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(54) **FLAVONOID COMPOUNDS OF LOW TOXICITY FOR BIOLOGICAL IMAGING APPLICATIONS**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

Flavonoid compounds that are selective for a protein, a portion or a living cell, or a portion of an organism may be used as biological imaging agents. The flavonoid compounds are useful for methods of imaging organisms such as zebrafish embryos and zebra fish. Flavonoid compounds may also be used to detect protein. Advantageously, flavonoids that selectively bind protein, a portion of a living cell, or a portion of an organism may exhibit a florescence "turn-on" mechanism, where the flavonoids that are selectively bound exhibit a florescence response when excited.

15 Claims, 19 Drawing Sheets
(14 of 19 Drawing Sheet(s) Filed in Color)